

IN ILLINOIS.

By CLARENCE J. ROOT, Meteorologist.

[Weather Bureau, Springfield, Ill.]

Destructive tornadic storms occurred in Illinois on April 16-17, and in Indiana on the 17th, causing in Illinois 7 deaths, the injury of 53 persons, and property losses estimated at \$295,000. The 7 p. m. weather map of April 16 shows a center of low barometer (29.46 inches) at Amarillo, Tex. At 7 a. m. of the 17th the principal center (29.48 inches) had moved to Toledo, Ohio, with secondary centers in Missouri and northern Illinois. At that time the winds were northerly in the northwest part of the State and southerly in the other areas, with all stations reporting thunderstorms during the night. The rainfall exceeded 2 inches at St. Louis and Terre Haute. By the evening of the 17th the center of disturbance had moved to Lake Huron. Illinois was directly in the path of the low pressure area.

The first tornado had its inception near Oakdale Washington County, probably about 11 p. m. of the 16th. It moved due northeast in a remarkably straight line across Washington County, passing through the extreme northwest corner of Jefferson County, then through Marion, Clay, Effingham, southeast corner Jasper, and Clark Counties, ending near the Indiana line about 6 miles west of Terre Haute.³ From reports received it is evident that the storm passed through Washington, Jefferson, and Marion Counties during the hour preceding midnight of the 16th. It appeared in Jasper County in the hour immediately following midnight, and then moved on across Clark County. There was ample evidence of true tornadic action. The width of the path of destruction varied considerably, but as a rule was less than 600 feet.

The first damage occurred at Nashville, where a power house was unroofed, a number of trees were uprooted, and there was considerable damage of a minor nature. The storm moved on to Irvington, doing some damage before reaching the town. The public school, about six residences, and many outbuildings were destroyed, and several business buildings and a number of residences were badly damaged. The losses in Washington County are estimated at \$100,000. The tornado then passed into the northwest corner of Jefferson County, damaging and destroying farm homes and properties in its passage. A church and school were destroyed in Jefferson County. The path then led through Marion County, where damage totaling \$14,000 was sustained.

An infant was killed at Irvington, and three lives were lost in the country east of the town. About 15 persons were injured in Irvington and in the country adjoining. In the next 40 miles of its course the destruction was rather limited, perhaps due to the storm lifting at times. The losses in Clay County were estimated at but \$2,000. There was damage at one farm place in Effingham County, and in the western part of Jasper County a barn was demolished and a house was unroofed. Severe damage began again at the edge of Rose Hill, Jasper County. The tornado then moved northeast through the country, damaging and destroying farm properties. In Jasper County two rural churches and at least three homes were completely destroyed, other residences were damaged, and much other property was damaged or destroyed. One man was killed in this neighborhood. One person reports the approach of the tornado as "an onrushing, roaring mountain of inky blackness, light beneath, accompanied by constant flashes of lightning." A correspondent reports the following freaks of the storm:

³ About 130 miles.—EDITOR.

Pieces of timber were stuck in the ground like fence posts; shingles and straws were sticking into trees; a piece of 2 by 4 was found imbedded several inches in a tree; roofs of some buildings were carried more than a mile; poultry surviving the storm were practically destitute of feathers; ends were blown out of houses, but pictures were left hanging on the walls in the same buildings; trees nearly 2 feet across were twisted off close to the ground; in many places grass growing in the fields was blown away and the ground left bare; many frail buildings directly in the tornado's path were left standing, while strong buildings nearby were completely wrecked; adjoining trees and buildings were blown down in opposite directions; in some buildings they seemed to explode outward as if caused by the internal pressure of the air.

In Jasper County there was one death, 10 persons were injured, and the property loss was \$50,000. The storm moved diagonally across Clark County, through the rural sections, injuring 10 persons in that county and inflicting a loss to property estimated at \$88,000. This tornado caused the death of 5 persons, the injury of 47, and an estimated property loss of \$275,000.

Another tornado occurred in the afternoon of April 17, being first seen just northwest of Odgen in the eastern part of Champaign County at about 3:30 p. m. It moved east through Fithian at 3:45 p. m., then curved northeastward, and passed 3 miles to the southward of Bismarck about 4 p. m. This storm crossed Vermilion County and passed into Indiana, being confined entirely to rural districts until it struck the town of Hedrick in Indiana. It appears that the tornado crossed Indiana and moved some distance into Ohio. All reports indicate the presence of a funnel-shaped cloud. It is probable that the tornado lifted at times, as there were places in its path where no damage was reported. The tornado traveled across country at a rate of about 40 miles per hour, this being the velocity of translation of the Mattoon tornado of May, 1917. At Odgen and Fithian the width of the path of great destruction was reported to be 250 to 300 feet. In Champaign County there were two deaths, and five persons were injured, the deaths occurring 2 miles north of Odgen. One person was injured in Vermilion County. A conservative estimate of the property loss from this storm, in Illinois, is \$20,000.

IN INDIANA.

TRUMAN G. SHIPMAN, Meteorologist.

[Weather Bureau, Indianapolis, Ind.]

Tornadoes occurred Monday, April 17, 1922, in Indiana and other States of the Ohio and middle Mississippi Valleys in connection with a trough-shaped area of low pressure which extended from the upper Lake region southward to Texas and moved slowly eastward during the 24 hours following 7 a. m., Monday. The tornadoes appearing in Indiana during this period probably crossed from Illinois. The first one struck southwestern Parke County⁴ about 2 a. m. and wrought damage estimated at \$10,000, but injured no one. About one-half hour later, the second one appeared a few miles southwest of Williamsport, Warren County, killed one person and damaged property to the extent of \$50,000. At 3 p. m., Brook, Newton County, was hit, and two persons were killed and one other was injured and property worth \$6,000 was destroyed.

At about 4 p. m. the third and principal tornado,⁵ apparently after having traveled 35 miles in Illinois, entered Warren County, 5 or 6 miles northwest of Attica, and worked destruction on the country near Hedrick, Sloan, Williamsport, and Attica. Rotary winds, a funnel-shaped cloud, with the attendant roar, a narrow path of total destruction, and instances of buildings exploding

⁴ Probably the Washington County, Ill., tornado.—EDITOR.⁵ Probably the Odgen, Champaign, Ill., storm—see preceding article.—EDITOR.